

REMARKS

Claims 15-21 are pending in the application.

Applicant claims a foreign priority date of March 17, 1995 which is based on Japanese patent application number 07-059121 via parent patent application 08/541,788 of October 10, 1995.

The present claims 15-21 have been amended to clarify the claimed invention and improve grammatical content. No new matter is entered.

Applicant's features include and relate to, for example, an optical amplifier which includes an optical coupler, a filter, a monitor and a fiber amplifier. The monitor detects input light via the optical coupler and the filter. The fiber amplifier amplifying a second optical signal with excitation by an exciting light from an output side of the optical fiber amplifier.

Claim 17 is objected to for failing to further limit claim 16. The features mentioned in claim 17 have been removed from claim 16, for example "which exists along with the first optical signal input to the optical filter." It is respectfully requested the claim objection be withdrawn.

The claims 15 and 18-19 are have been rejected under second paragraph 35 U.S.C. § 112, as being indefinite. The feature which was unclear in the optical filter has been deleted. It is respectfully requested this rejection be withdrawn.

Claims 15, 18-20 have been rejected under 35 U.S.C. § 102 (e), as being anticipated by Shmizu et al., U.S.P. No. 5506724 (Shmizu).

Claims 16-17 have been rejected under 35 U.S.C. § 103 (a), as unpatentable over Shmizu.

Claim 15 includes "an optical coupler dividing the optical input signal into a first optical signal and a second optical signal", "an optical filter operatively connected to the optical coupler filtering the first optical signal" and "an optical fiber amplifier formed with erbium operatively connected to the optical coupler amplifying the second optical signal".

Therefore, in the claimed invention, the coupler divides the input light and the divided input light reaches to the optical filter and the optical fiber amplifier.

However, Shmizu's coupler 4 divides a light from a terminal 1 into two lights so as to transmit lights into the rare earth doped fiber 3 and termination 5a. See line 15-17 and 28-30 of column 8. More specifically, Shmizu's filter 3 receives ASE from the rare earth doped fiber 3. See line 15-17 of column 8, which explain "ASE output from the rare earth doped fiber is input into an optical filter 9".

In contrast applicant's claim recites an optical coupler dividing the optical input signal into a first optical signal and a second optical signal; an optical filter operatively connected to the optical coupler filtering the first optical signal.

Applicant's filter is filtering the first optical signal from the input signal.

Therefore, Shmizu lacks the filter of claimed element because Shmizu is filtering from the ASE from the fiber 3. Shmizu's filtering target is different from the claimed invention because the claimed invention's filter filters input light but Shmizu's filter filters ASE light.

Shmizu is teaching away from claimed invention.

With regard to Claim 18

Claim 18 includes "an optical coupler receiving a light and dividing the received the light into first and second lights", "an optical filter operatively connected to the optical coupler

filtering the first light” and “an optical fiber amplifier doped with erbium, receiving the second light from the optical coupler”:

Therefore, in the claimed invention, the coupler divides the input light and the divided input light reaches to the optical filter and the optical fiber amplifier.

However, Shmizu’s coupler 4 divides a light from a terminal 1 into two lights so as to transmit lights into the rare earth doped fiber 3 and termination 5a. See line 15-17 and 28-30 of column 8. More specifically, Shmizu’s filter 3 receives ASE from the rare earth doped fiber 3. See line 15-17 of column 8, which explain “ASE output from the rare earth doped fiber is input into an optical filter 9”.

In contrast applicant’s claim recites an optical coupler dividing the optical input signal into a first optical signal and a second optical signal; an optical filter operatively connected to the optical coupler filtering the first optical signal.

Applicant’s filter is filtering the first optical signal from the input signal.

Therefore, Shmizu lacks the filter of claimed element because Shmizu is filtering from the ASE from the fiber 3. Shmizu’s filtering target is different from the claimed invention because the claimed invention’s filter filters input light but Shmizu’s filter filters ASE light.

Shmizu is teaching away from claimed invention.

With regard to Claim 19

Claim 19 is a dependent claim of claim 18, therefore include limitation of the coupler, filter and amplifier in addition to further distinguishing features.

With regard to Claim 20

Claim 20 includes “an optical coupler dividing an input light into first and second

lights”, “an optical filter filtering the first light from the optical coupler” and “an optical fiber amplifier doped with erbium, receiving the second light from the optical coupler and amplifying the second light”.

In the claimed invention, the coupler divides the input light and the divided input light reaches to the optical filter and the optical fiber amplifier.

However, Shmizu's coupler 4 divides a light from a terminal 1 into two lights so as to transmit lights into the rare earth doped fiber 3 and termination 5a. See line 15-17 and 28-30 of column 8. Shmizu's filter 3 receives ASE from the rare earth doped fiber 3. See line 15-17 of column 8, which explain “ASE output from the rare earth doped fiber is input into an optical filter 9”.

In contrast applicant's claim recites an optical coupler dividing the optical input signal into a first optical signal and a second optical signal; an optical filter operatively connected to the optical coupler filtering the first optical signal.

Applicant's filter is filtering the first optical signal from the input signal.

Therefore, Shmizu lacks the claimed filter element because Shmizu is filtering the ASE from fiber 3. Shmizu's filtering target is different from the claimed invention because the claimed invention's filter filters input light but Shmizu's filter filters ASE light.

Shmizu is teaching away from claimed invention.

For at least the foregoing reasons it is respectfully requested the rejection under 35 U.S.C. § 102 of claims 15, 18-20 be withdrawn.

Claim 16 has been rejected under 35 U.S.C. § 103 (a) as being anticipated by Shmizu.

Claim 16 includes “an optical coupler dividing the optical input signal into a first optical

signal and a second optical signal”, “an optical filter operatively connected to the optical coupler passing the first optical signal and blocking an exciting light” and “an optical fiber amplifier formed with erbium operatively connected to the optical coupler for amplifying the second optical signal”.

As pointed out above, in the claimed invention, the coupler divides the input light and the divided input light reaches to the optical filter and the optical fiber amplifier.

Applicant’s filter is filtering the first optical signal from the input signal.

Therefore, Shmizu lacks the claimed filter element because Shmizu is filtering from the ASE from the fiber 3. Shmizu’s filtering target is different from the claimed invention because the claimed invention’s filter filters input light but Shmizu’s filter filters ASE light.

In the office action it is pointed out that “the filter (#9) filters part of the ASE or all of the ASE” but motivation of the claimed invention is to detect a portion of input light into optical fiber amplifier, therefore, Shimizu’s motivation is different from the motivation of the claimed invention.

Additionally, Shmizu does not suggest to detect a portion of input light into optical amplifier instead of detect ASE from optical amplifier fiber 3.

Claim 17 includes at least the distinguishing features of claim 16 and should likewise be allowed.

Claim 21 have been rejected under 35 U.S.C. § 103 (a) as being anticipated by Shmizu in view of Yamane U.S.P. No.5764404.

Claim 21 includes “an optical coupler dividing an input light into first and second lights”, “an optical filter filtering the first light from the optical coupler” and “an optical fiber amplifier

doped with erbium, receiving from the optical coupler and amplifying the second optical light".

As pointed out above, Shmizu's filter 3 receives ASE from the rare earth doped fiber 3. See line 15-17 of column 8, which explain "ASE output from the rare earth doped fiber is input into an optical fiber 9".

Therefore, Shmizu lacks of the filter of claimed element. Moreover, Shmizu's filtering target is different from the claimed invention because the claimed invention's filter filters input light but Shmizu's filter filters ASE light.

In the office action it is pointed out that "the filter (#9) filters part of the ASE or all of the ASE" but motivation of the claimed invention is to detect a portion of input light into optical fiber amplifier, therefore, Shmizu's motivation is different from the motivation of the claimed invention.

Moreover, Shmizu does not suggest to detect a portion of input light into optical amplifier instead of detects ASE from optical amplifier fiber 3.

Additionally, in this application a CPA was filed on December 26, 2000, and the subject matter of Yamane and the claimed invention "were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person." Therefore, Yamane which was prior art under former 35 U.S.C. §103 via 35 U.S.C. §102(e) is now disqualified as prior art against the claimed invention.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,



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